

DETAILED ACTION

1. The Request for Continued Examination filed on 11/12/09 is acknowledged.

Claim Objections

2. Claims 12-13 are objected to because of the following informalities:
 - Claim 12, "any one of claims 1, 3, 4, 6, 8 and 10" should be changed to "any one of claims 1 and 6" because independent claims 3, 4, 8 and 10 are non-elected claims.
 - Claim 13, "according to claim 1 or 3" should be changed to "according to claim 1" because independent claim 3 is non-elected claim.Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-2 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Nishi et al (US 7,141,817).

Regarding claims 1 and 12, Nishi (Fig. 2B) discloses a light emitting device comprising: a first electrode 211, a laminated body including a layer 233 containing a light emitting substance in contact with the first electrode 211, a layer 235 having an acceptor level (i.e., electron transporting layer) in contact with the laminated body, a layer 236 having a donor level (i.e., electron transmitting region) in contact with the layer 235 having the acceptor level, and a second electrode 214 in direct contact with the layer 236 having the donor level.

Regarding claim 2, Nishi (Fig. 2B) further discloses that the layer 236 having the donor level includes Alq3.

5. Claims 1, 6-7, 12-13 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Nishi et al (US 7,141,817).

Regarding claims 1 and 12, Nishi (Fig. 2B) discloses a light emitting device comprising: a first electrode 214, a laminated body including a layer 233 containing a light emitting substance in contact with the first electrode 214, a layer 232 having an acceptor level (i.e., hole transporting layer) in contact with the laminated body, a layer 231 having a donor level (i.e., hole injecting region) in contact with the layer 232 having the acceptor level, and a second electrode 211 in direct contact with the layer 231 having the donor level.

Regarding claim 13, Nishi (Fig. 2B) further discloses that when a potential of the second electrode 211 (anode) is set higher than a potential of the first electrode 214 (cathode), a hole generated in the layer 232 having the acceptor level is injected in the laminated body.

Regarding claim 6, Nishi (Fig. 2B) discloses a light emitting device comprising: a first electrode 211, a laminated body including a layer 233 containing a light emitting substance in contact with the first electrode 211, a first layer (231, 232) containing a first substance 231 (i.e., hole injecting region) of which a hole mobility is higher than an electron mobility and a second substance 232 (i.e., hole transporting region) that can accept an electron from the first substance in contact with the laminated body, a second layer (235, 236) containing a third substance 235 (i.e., electron transporting region) of which an electron mobility is higher than a hole mobility and a fourth substance 236 (i.e., electron transmitting region) that can donate an electron to the third substance in contact with the first layer, and a second electrode 214 in direct contact with the second layer (235, 236).

Regarding claims 7 and 15, Nishi (Fig. 2B) further discloses that the third substance 235 is Alq₃ and when a potential of the second electrode is set higher than a potential of the first electrode, a hole generated in the first layer (231, 232) is injected in the laminated body (column 17, lines 48-49).

Response to Arguments

6. Applicant's arguments with respect to amended claims have been considered but are moot in view of the new ground(s) of rejection. The new reference is applied in the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phat X. Cao whose telephone number is (571)272-1703. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571)272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. X. C./
Primary Examiner, Art Unit 2814

/Phat X. Cao/
Primary Examiner, Art Unit 2814